

MANTLE CODE SHEET for the Barkly Phosphate Project Nov/Dec 2009

Weathering	mantle
weak	1
weak - mod	2
moderate	3
mod - strong	4
strong	5

Structure	mantle
shear	sh
fracture	fr
joint	jt
vein	ve
slickenslides	sl
brecciated	br
fault	fa
bedded	bd
foliated	fo
schistose	sch
mylonitic	myc

Grain Size	mantle
very fine	VFGR
fine	FGR
medium/fine	MFGR
medium	MGR
med/coarse	MCGR
coarse	CGR
very coarse	VCGR
very coarse/Coarse	VC-CGR
very fine-fine	VF-FGR
very fine/medium	VF-MGR

Colour	mantle
white	WH
creme	CM
yellow	Y
red	RD
green	GN
khaki	KH
purple	PU
brown	BR
black	BK
grey	GY
orange	or
beige	BE
molted	-
pink	PI
oche	RE/OR
blue	b
mauve	p
green/blue	gr/b
grey/green	gy/gr
cream/grey	cg
pink/red	pr
grey/white	gw
tan	TAN

Shade	mantle
light	l
medium	m
dark	d

Lithology	mantle
adamellite	ad
granite	gr
granite gneiss	gr
pegmatite	pg
soil	SOL
alluvium	av
colluvium	cv
saprock	sr
chert	CHT
mudstone	ms
siltstone	SLT
sandstone	SST
conglomerate	cg
greywacke	gw
basalt	ba
andesite	ad
rhyolite	ry
syenite	sy
tuff	tf
crystal tuff	xt
lithic tuff	lt
pegmatite	pg
aplite	ap
dolerite	do
gabbro	gb
diorite	di
granodiorite	gd
granite	gr
metavolcanic	mv
volcanics	vc
mylonite	my
Limestone	LIM
Dolomite	DOM
Cavity	CAV
Dolomitic Limestone	DL
Clay	CLY
Geothite	GEO
Calcite	CAL

Texture	mantle
bedded	bd
foliated	fl
gneissic	gn
greissen	gr
hornfels	hf
laminated	lm
porphyritic	po
schistose	sc
sheared	sh

Veining	mantle
carbonate	cb
chlorite	cl
epidote	ep
gypsum	gy
haematite	hm
iron products	fe
pyrite	py
quartz vein	qv
sericite	se
talc	tl
unknown	uk

Alteration	mantle
carbonate	cb
clay	cy
sericite	se
chlorite	cl
ferruginous	fe
greisen	gr
haematite	hm
silica	si
potassic	k
limonitic	lm
biotite	bt

Mineralisation	mantle
arsenopyrite	as
chalcocopyrite	cp
galena	ga
metal oxides	mx
metal sulphates	ms
pyrite	py
sphalerite	sp
sulphide(var)	su
Pyrrhotite	po
unknown	uk

Alt.Strength	mantle
weak	1
weak - mod	2
moderate	3
mod - strong	4
strong	5
increasing	
decreasing	
variable	

Fizz Test	mantle
no reaction	NR
very weak	VW
weak	W
weak - mod	W-M
moderate	M
mod - strong	M-S
strong	S
very strong	VS

Angularity	Mantle
rounded	R
sub-rounded	SR
sub-angular	SA
angular	A

Mineral. Style	mantle
disseminated	d
vein	v
semi-massive	sm
massive	m

P2O5 EST %	Mantle
Low P (0.5-3)	L
Low-Med P (3-4)	LM
Med P(4-6)	M
Med-High P (6-8)	MH
High (8-10)	H
Very High P (10+)	VH

Note:
 For trace amounts worthy of mention use 0.1% (must be numerical value)
 Use "sulphide" code for fine grained aggregates and rare variants
 Use "unknown" code (uk)for features that need further investigation: use sparingly
 Use "no code" for features that will require future coding

P2O5 EST % - were base upon the what the Mantle XRF readings showing at the time
 Rec % - was a subjective estimate of the contents in the bulk sample bag, as the bulk were very large for the sample, accuracy of the estimate was greatly reduced
 Lithology - Carbonates (Limestone, Dolomite and Dolomitic Limestone) were generally simplified to Limestone unless there was more indication there was a larger Dolomitic component.
 Grain Size - as with VFGR litho especially the Limestone unit, it was difficult to accurately determine the Angularity of grain and was left blank when unsure. A sand folder was used to help distinguish the various grain roundness and size.
 Fizz Test - BTRC001-BTRC018 was done using HCL with 50% water, hardware/supermarket HCL, BTRC019-BTRC036 done using Lab grade 30% HCL diluted with 50% water, often the acid was warm from being in the sun during the days of temperature of 40+ degrees heat.